

**Vicenzino B, Paungmali A, et al. Specific manipulative therapy treatment for chronic lateral epicondylalgia produces uniquely characteristic hypoalgesia. Manual Therapy 2001;6(4):205-212.**

Design: Randomized crossover trial

Brief summary of results:

- 24 patients (14 men, 10 women, mean age 46) treated for tennis elbow at a university physiotherapy department in Queensland, Australia
- Eligible if they had 6 weeks of symptoms
- Ineligible if they had previous manipulative therapy of the elbow, aversion to manual contact, or were using analgesics or NSAIDs
- Three interventions were done in random order: manipulation, placebo, and control
- Manipulation consisted of a lateral-glide mobilization applied by a physiotherapist while the patient performed a pain-free gripping motion; 6 repetitions were performed per session
- Placebo consisted of firm manual contact over the patient's elbow applied by the same physiotherapist
- Control consisted of the patient resting the arm while supine, without contact with the physiotherapist
- Each patient had all three experimental conditions in separate treatment sessions, spaced at least 48 hours apart
- Two outcomes were measured at each session: pain-free grip strength and pressure pain threshold
- Pain-free grip strength was measured three times at each session: before the session began, during the treatment application, and at the end of the treatment
- Pressure pain threshold was measured twice at each session: before and immediately after the treatment application
- For the manual mobilization treatment, pain-free grip strength increased from a mean of 107 N before treatment to 156 N during its application and 152 N after the session
- Pain-free grip strength was not improved by the placebo or control interventions
- Pressure pain threshold was not affected by any of the three interventions

Authors' conclusions:

- Mobilization treatment as applied in the study provides substantial pain relief

Comments:

- Much basic information is missing; 24 patients were randomized to the order in which the interventions were given, but there are 6 possible permutations of three interventions, and there is no information about the number of patients randomized to each permutation
- The duration of the treatment sessions is not specified, or at exactly what part of the treatment session the "during treatment" measurements were done

- The main outcome was measured immediately after the treatment was applied, and no follow-up past the end of the treatment session was measured until the start of the next scheduled treatment session 48 hours later
- If there were a number of patients who received the experimental treatment as the first of three interventions, the favorable effect on grip strength appears to have dissipated completely by the start of the next treatment session; this is the only clear interpretation of Figure 2

Assessment: Inadequate not only for an evidence statement but even for information that would support a consensus statement

**Paungmali A, O'Leary S, et al. Hypoalgesic and Sympathoexcitatory effects of Mobilization With Movements for Lateral Epicondylalgia. Physical Therapy 2003;83:374-383.**

This study is very similar to the one above, was done in the same setting, and is equally inadequate. Measures of sympathetic nervous system function were made, but the study lacks the same basic information as indicated above. No further summary is warranted.